

## Employees open their hearts to Katrina victims



In the wake of Hurricane Katrina, Y-12 employees have donated more than \$33,000 to relief efforts—and that total was raised in only two days.

Dennis Ruddy, president and general manager, said, “With the corporate matching funds from our Board of Directors, that means you’ve made a \$66,000 difference to a lot of folks in need. With additional money still flowing in from other locations, we’re hopeful that the full matching funds will be made available.”

Our work force is a generous one, and this time is no different. Many employees have donated directly to the American Red Cross, through churches or other organizations.

“As you continue to watch the news and keep the victims in your thoughts and prayers, know that you’re making a difference,” Ruddy said.

The Y-12 donation drive was sponsored by the Y-12 Employees’ Society.

In addition to the donation, BWXT Y-12 and the National Nuclear Security Administration’s Y-12 Site Office worked with the Department of Homeland Security to make four portable generators and five large stationary generators available for the relief effort.



Photos: Houston  
Astrodome, Sept. 1,  
2005. Photographer:  
Daniel Cima/American  
Red Cross.

## Y-12 deploys first automated weapon system in NWC

The first automated security weapons system within the U.S. Department of Energy Nuclear Weapons Complex was deployed at the Y-12 National Security Complex as of Sept. 1. The use of the technology provides a significant improvement in the level of security at Y-12.

The new system, known as the Remotely Operated Weapon System, or ROWS, is an automated weapons platform used to protect special nuclear materials at Y-12. The system is operated by a security police officer stationed in a remote location using video cameras and electronic controls.

Jerry Paul, principal deputy administrator of the National Nuclear

Security Administration, said, “The application of new technology is an essential part of our plan to providing the security necessary to protect important national assets such as Y-12. We are very pleased with the deployment of this technology, which dramatically increases the security of sensitive facilities at Y-12. We expect that this and other security-related technologies also will be applied to other key nuclear weapons production and research facilities across the nation.”

Paul visited Oak Ridge to participate in tours and briefings on Y-12 programs, missions and modernization activities, including the plant’s role in U.S. nuclear nonproliferation activities.

In his remarks at a demonstration of ROWS at the Oak Ridge Central Training Facility, Paul noted that the application of new technologies reflects an innovative and aggressive approach to security.

ROWS was deployed at Y-12 earlier this summer. The technology was developed by Sandia National Laboratories in New Mexico. Wackenhut Services – Oak Ridge, BWXT Y-12 and the Y-12 Site Office coordinated the deployment of this new security weapons system.

—Condensed from an NNSA YSO news release

# Denny's desk

## PRYDE cleans up Y-12



In Y-12's 62 years, our mission has changed a number of times. As a consequence, we have legacy buildings and a lot of old, excess equipment and material spread across the site. To deal with these legacy issues and clean up the site, we initiated the Y-12 PRYDE program.

In addition to performing our missions well, our workplace is also a showcase

when it comes to our customers. Our individual space is the first thing they often see when visiting. Y-12 PRYDE is a new approach to the old problem of keeping down clutter and making our workplace more efficient in the process.

The PRYDE Program integrates four important programs (Pollution Prevention, Clean Sweep, Good Housekeeping and Asset Management) to make them more effective than they could ever be as separate initiatives.

There is a proven link between housekeeping and industrial safety. It makes sense that a cleaner, neater, more orderly environment is less likely to cause industrial accidents.

Since 1993, Y-12 has recycled 1.38 billion pounds of material, and in the process saved the government more than \$36 million. As part of a federal initiative, Y-12 also recycled more than 5,200 cubic yards of scrap metal in conjunction with the Clean Sweep Program.

With many of our older buildings being removed and new buildings going up, it is more important than ever to incorporate good housekeeping as a key part of our mission.

With the rating system for each building, and dividing the site into zones where senior management support is focused, we have created a competitive environment along with the expectation of an uncluttered, clean and efficient workplace.

Y-12 will undergo some dramatic changes in the next several years with new facilities, turning our valley into a very different landscape. These are exciting times, but as Winston Churchill once said, "It's not enough that we do our best; sometimes we have to do what's required." We are proving ourselves every day in a hundred different ways, but let's not forget to pay attention to the details that will allow us to reach a higher level of excellence with greater efficiency and economy.

## Y-12 BBQ rib cook-off raises more than \$4.3 thousand for United Way

The Y-12 BBQ rib cook-off held at Bissell Park was a great success, raising \$4,373.50 for United Way. Sixteen teams participated in a very "heated" competition.

### Judge's Choice Awards

- 1st place, The Rack PAC — led by Bill Wilburn with Ellen Boatner and Pat Carson
- 2nd place, Good Tymes Ribs and Libations — led by Keith Kellar with Jerry Harris, Arnold Harper, Nancy Johnson and Bill McKeethan
- 3rd place, Ribs To Beg For — led by Larry Rackstraw with Susan Howell, Mike Richesin, John Sinclair and Bobbie Sweet

### People's Choice and Best Ribs Money Can Buy Awards

- Da' Bomb/Rib Insanity — led by Janice Christman with Carl Cardwell, Tom Christman, Sherry Crass and Jim Parker



Finger lickin' good—Dennis Ruddy, second from left, presents the 1st place trophy for best BBQ ribs to Pat Carson, Bill Wilburn and Ellen Boatner.

## Kenny Cook elected president of ATLC



Kenny Cook, a chemical operator at the Y-12 National Security Complex, has been elected president of the Atomic Trades and Labor Council, the organization that represents union employees at the Department of Energy's Oak Ridge Complex.

Cook was elected July 28 during a meeting of ATLC delegates and installed as president in a brief ceremony at the conclusion of the meeting.

A resident of Clinton, Cook has worked at Y-12 for 27 years. He is a member of the United Food and Commercial Workers, an affiliate of the International Chemical Workers Union Council. He is married to Gail Cook, who works as Anderson County's budget director.

Cook replaces Carl R. Scarbrough, who retired from Y-12 on June 30, leaving the presidency of the organization vacant.

—Condensed from *The Oak Ridger*

## Y-12 welders forge ahead

Eight hourly welding inspectors from the Quality Assurance organization took it upon themselves to complete a challenging menu of classwork, home study and examinations to complete their American Welding Society certifications for welding inspectors.

Those receiving AWS certification are Freddy Armes, Pat Davis, Brian Fisher, Roger Hill, Glen McCrary, Luke Newman, Leisa Pittman and Johnny Williams.

The class lectures required 40 hours of concentrated effort, and that was only the beginning. Some two months of home study were then required. At the end of this schedule was the three-part examination, which was approximately eight hours long. The examination tested hands-on expertise, practical knowledge and an open-book segment of possible scenarios.

Current conditions dictate that Y-12 facilities must be constructed or repaired with the highest quality standard welds available. This situation prompted a "first" among hourly welding inspectors at Y-12, an independent initiative "above and beyond" daily job requirements that benefited Y-12, the new facilities and the employees' careers.

## Sexton named Union County Red Cross DAT captain

Jimmy Sexton, a machinist supervisor in Manufacturing's Depleted Uranium Operations, has been promoted to captain of the Union County Red Cross Disaster Action Teams.

Sexton joined the county Red Cross in 2002 and has received training in mass care, health services, shelter operations, damage assessment and response to weapons of mass destruction, among others, to be better prepared when a community-wide disaster strikes. After becoming a member of the Union County DAT, Sexton responded to four fires in the first eight days he was on call, and he and his wife, Ruth, have been responding to local fires ever since.

Sexton DAT duties include overseeing all locally prepared records and vouchers for accuracy and completeness, mentoring new members to the teams and assisting in mobilizing the teams in the event of a community-wide disaster.



Jimmy Sexton and his wife, Ruth, Union County Red Cross volunteers, present a stuffed bear to a child in need.

# THE Y-12 COMPLEX SAFEGUARDING THE Y-12 NATIONAL SECURITY COMPLEX

## SAFEGUARDS & SECURITY SENTINEL

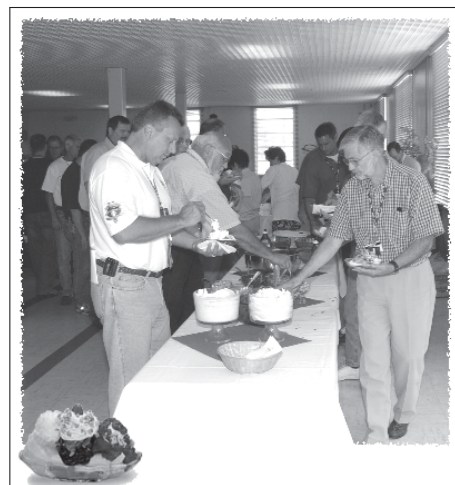
### OA report notes positive trends

Y-12 received praise for “significantly improved” performance from the recent safeguards and security inspection by the Office of Independent Oversight and Performance Assurance, generating a letter of commendation from Linton Brooks, National Nuclear Security Administration administrator.

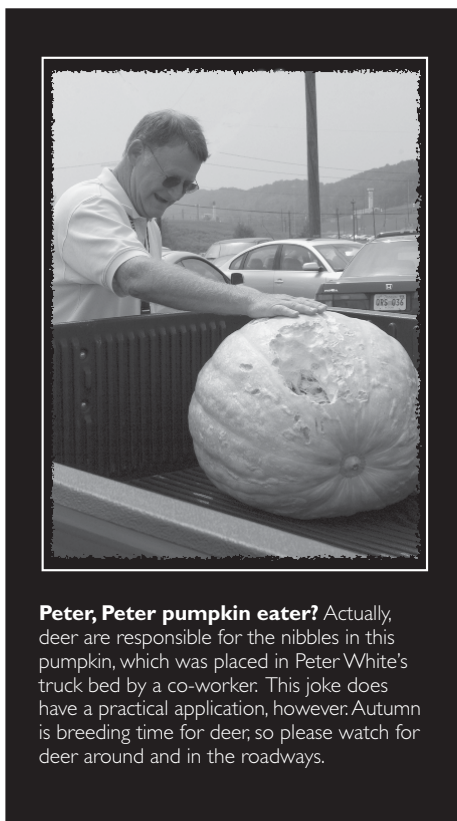
The report noted effective management support and “positive trends ... not only in procedural compliance but also in behavior and cultural changes.” Y-12 was also recognized as having one of the leading classified computer security programs within the Complex.

With regard to integrated management, the combination of integrated safety management and integrated safeguards and security management, the report noted that “this level of visibility, commitment, and integration has not been seen elsewhere to date, and the Y-12 program is a model....”

These are noteworthy comments from a critical review, and, as Butch Clements, Safeguards and Security director, noted, “All Y-12 employees contributed to this success. They understand the important work that we do for the nation, and they’ve demonstrated that they are doing the right things to protect our national security interests.”



Y-12 employees build their versions of the perfect banana split. S&S provided the splits as a “thank you” to Y-12 employees involved in the successful completion of OA 10, a safeguards and security inspection of Y-12 conducted in May and June.



**Peter, Peter pumpkin eater?** Actually, deer are responsible for the nibbles in this pumpkin, which was placed in Peter White's truck bed by a co-worker. This joke does have a practical application, however: Autumn is breeding time for deer, so please watch for deer around and in the roadways.

### D\*I\*C\*E is nice

Ray Semko, also known as the DICE Man, recently spoke to a full house of Y-12, U.S. Department of Energy and National Nuclear Security Administration employees at Pollard Auditorium.

Semko is a security/counter-intelligence specialist for the U.S. Department of Defense, Defense Security Service, Security Education, Training and Awareness directorate and the creator of DICE—Defensive Information to Counter Espionage.

Telling his audience that “we are the strength of America,” Semko entertained as he emphasized the importance of operations security, or OPSEC. Noting one of the focuses of OPSEC, protecting sensitive information, the DICE Man quipped that we’ve protected two pieces of information—the formula for Coke and the recipe for Kentucky Fried Chicken.

Seemingly innocent information, like material published in the newspaper, can provide keys for terrorists. Semko noted that the attackers on 9/11 relied on sensitive information. And, if 9/11 was frightening, Semko cautioned in the words of Bachman Turner Overdrive, “You ain’t seen nothing yet.”

Entertaining and provocative, the DICE Man provided food for thought. As he stated, when it comes to national security, “we are the difference makers.”



Ray Semko, a.k.a. the D\*I\*C\*E Man, presents his spin on OPSEC.

# Help support finding a cure for breast cancer



Help make breast cancer a thing of the past. Susan Spangler, Financial Management, encourages Y-12 employees and their family members to participate in the Susan G. Komen Race for the Cure.

*"One in eight women will be affected by breast cancer. Research, education and early detection are crucial to eradicating this dreaded disease."*  
—Susan Spangler

Susan Spangler of Financial Management has participated in the Susan G. Komen Race for the Cure since 1998 and has spearheaded the Y-12 team's efforts for the last six years.

The 5K run/walk will start at the Civic Coliseum on Saturday, Oct. 22, at 9 a.m., with the one-mile family fun run/walk commencing at 9:30 a.m.

Spangler, who was diagnosed with breast cancer in 1994 and had a recent recurrence, does have much more than a personal motivation to participate. She said, "I think it is important to share my experience with other women to alleviate fears and anxiety."

Sharon Bays of Manufacturing is Spangler's co-captain for Y-12's team. Together, they hope to have 65 participants and raise \$2,000. Spangler encourages her fellow employees, their families and friends to participate in this year's race. "If you can't participate, please consider a donation to this worthy cause."

To register or make a donation for Race for the Cure, visit the Komen Knoxville website at [www.komenknoxville.org/pages/race.htm](http://www.komenknoxville.org/pages/race.htm). The team name is "BWXT Y-12." For more information about Y-12's team, contact Spangler (shs; 576-5531) or Bays (zgb; 574-2497).

## National stockpile mercury is relocated

A major effort was initiated earlier this year to remove mercury from the Y-12 National Security Complex.

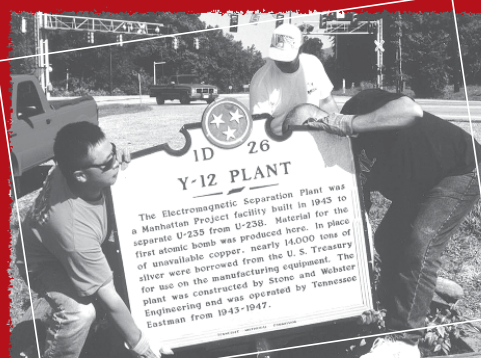
Y-12 has safely and securely stored 699 metric tons (more than 20,000 flasks) of mercury from the Defense National Stockpile Center in a Y-12 warehouse since the mid-1960s. This quantity accounts for 16 percent of the DNSC's excess inventory. The mercury on inventory is graded as "prime virgin" (i.e., between 99.5 and 99.9 percent pure) with an estimated value of \$16 million.

The U.S. Congress in the early 1990s determined that the U.S. Department of Defense no longer needed to maintain a stockpile of commodity-grade elemental mercury. Under DoD jurisdiction, DNSC is responsible for the disposition of stockpiled materials declared in excess of national defense needs.

DNSC has decided to consolidate its inventory at one site. Y-12 assisted DNSC in transferring this inventory to the Warren, Ohio, facility, where the flasks were overpacked in 30-gallon drums. The transfers began in March and completed in late April. A total of 46 commercial trailer loads (approximately 15 metric tons each) were shipped from Y-12.

After the transfer of DNSC's mercury, approximately 5,500 square feet (or approximately 40 percent) of Y-12's warehouse storage space will have been cleared.

## Plan to volunteer



BWXT Y-12's Day of Volunteering is planned for Oct. 15. If you have a charity you would like considered for the event, contact Alice Brandon (aim; 576-2963).

A Kids Kamp is also planned for volunteering employees' children ages 3 through 12 at the Children's Museum of Oak Ridge from 7 a.m. until noon. Please contact Melissa Leinart (6ml; 574-1621) for more information.

# Y-12 All-Hands Meeting

## “So many things have gone well this year...”

More than 3,000 employees were in attendance for the August 11 All-Hands Meeting held at the Knoxville Civic Coliseum. Dennis Ruddy, BWXT Y-12 president and general manager, gave a “state of the plant” address, presenting information on where we are now and where we are headed in the future as a company.



If you were unable to attend the All-Hands Meeting, videotapes and DVDs of the meeting are available from Video and Videoconferencing Services (574-1639), or the video is available at your desktop via streaming video at <http://home1.y12.doe.gov/cs/stream>. Click on Available Streams, which will take you to the All-Hands Meeting 2005 link. The stream runs 1 hour 26 minutes and is Official Use Only.

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### **FOLLOWING ARE EXCERPTS FROM DENNIS RUDDY'S PRESENTATION**

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Anything we do at Y-12 is our mission, and we've done some pretty amazing things. We finished the Peacekeeper life extension program this year and are kicking off two more life extension programs.

We also do some other things not related to weapons. One of the things we do is process uranium as part of nonproliferation. We supply that material to various places, Tennessee Valley Authority being one of them for use in commercial reactors to produce electricity. And that is a powerful thing for two reasons: One, it takes that uranium out of the world, so we don't have to worry about it getting into the wrong hands, but the second thing it does is provides us with an alternative energy source. I think all of you are familiar with the problems we are having at the pumps lately. Our dependence as a country on petroleum as an energy source puts us at a disadvantage when there are problems in the world, so alternative energy sources are even more important.

One of the things we suffer from and we all suffer from it to a degree, is the red tape we have to navigate through. One of the things we kicked off was paperwork reduction for minor work packages. So far, we have done 10,000 jobs using this streamlined approach. That is about 40,000 manhours even with the most conservative measures. That is the equivalent of adding 23 people to our roll. That is an important step in the right direction in

terms of our being an agile manufacturing plant in continuing to support the nation.

One of the things we undertook last year was our productivity initiative when we were looking at the possibility of a continuing resolution from Congress to fund us for the rest of the year. A continuing resolution doesn't really address the specific work you will do, but it does establish a level of funding based on the prior year. It also restricts you from getting into new work with that funding. We committed ourselves to go out and make the existing work more productive so that we could make available for ourselves money that we needed for modernization and other projects around the plant.

That program has been more successful than any of us imagined. **One hundred million dollars worth of work has been started this year that we didn't have the people to assign to do at the beginning of the year, and we have completed \$60 million of that work.** That is a different Y-12 than the Y-12 that asks, "What's the charge number?" That's a different approach to taking command of the things that we need to do to be a productive place. It is the equivalent of 440 people transferred to new work to better the plant.

### MODERNIZATION

We are integrating the security needs of the plant with the new facilities being built. Our Highly Enriched Uranium Materials Facility is a building that is designed to the highest levels of security today. It will enable us to have the safest storage facility for special nuclear material in the world. This is where security, mission and safety requirements all come together. This project is enormous and is one of the largest undertakings we have ever had other than the initial construction of Y-12 during the Manhattan Project.

We also have planned two new alternatively financed buildings that will allow \$100 million



dollars of construction that didn't have to be approved by Congress and will allow us to move out of 55 buildings across the site and demolish 30 of those buildings.

### SAFETY

Safety underpins everything we do, and the process we have chosen is behavior-based safety. The most important factor is that the people in the plant who

do the work are engaged in observing and identifying the things that we need to improve so that fewer and fewer of us get hurt, and eventually none will get hurt.

### SECURITY

One of the greatest achievements in security was selling a new concept of protecting our materials to the government. We had a very bad report card in security, but what we realized was that in the area of security there are only two options: You can comply, or you can comply. We did what needed to be done so that when they came back what they saw was undoubtedly some of the best work in security that the government had ever seen. They said that the work we had done was remarkable. They told us that what they saw at Y-12 wasn't Integrated Safeguards and Security Management, but that we had transcended that principle into Integrated Management.

### COMMUNICATION

This is an area that is very important and integral to our success. The more we talk to each other and the better we understand each other will benefit Y-12.

*The Y-12 Report*, community relations, No More Surprises, Fundamentals, etc., are just a few of the initiatives we have in the area of communications.

### WHERE WE'RE GOING

Almost three years ago when I first came to Y-12, we were like the *Little Engine That Could*. I think we have surpassed that and are on the downhill ride. We are showing that we are best in class in so many areas and improving in others.



Fundamentals—Live by principles, not just rules

## Fundamental 11—Know your customers

Remember anyone—and everyone—who uses your work is your customer. Always make sure your customers are satisfied with your efforts. Glenn Kizer, Financial Management division manager, is the management champion for Fundamental 11.

Of the many tasks we perform every day, satisfying our customers is the single most important one and should be the focus of all our efforts.

If we were to develop a scientific model that defines a good provider/customer relationship, it would include one element: We need to know certain things about each customer.

Always know each customer's:

- unique situation and expectations regarding our products and services,
- continually changing vision,
- desires,
- specifications/characteristics/quality details of the desired products/services,
- schedule for delivery and
- cost limitations and other constraints.

The model would include taking other actions to ensure customer satisfaction.

- Follow through on all our commitments.
- Make ourselves available to our customers.
- Ensure the quality of our products and services.
- Stay current on our products and services.
- Practice good communication skills throughout the life of every project.
- Practice “the intangibles (see sidebar).”

No two customers are alike, but there is a common denominator with all customers: Everyone likes to know he or she is important, and everyone appreciates exceptional service. So if we practice the art of putting our customers first and providing superior products, then we've greatly improved the odds that we'll continue to prosper in a highly

### THE INTANGIBLES

- Treat customers with respect. “Do to others as you would have them do to you.”
- Remember “The customer is always right.”
- Remember the human aspect. Get to know your customers on some personal level.
- Remember your responsibility as a representative of BWXT Y-12 and practice company ethics.
- Remember your place in the community and recognize that what you say about your company has an impact on your employer and, ultimately, you.
- Go the “extra mile” for your customers.

competitive, scrutinized environment.

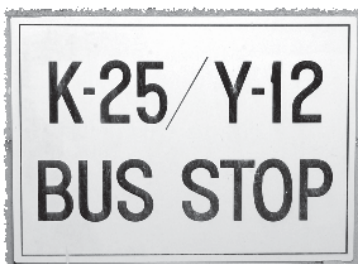
If we constantly remind ourselves of the golden rule: “Do to others as you would have them do to you” and try to put ourselves in our customers' shoes, then carrying out these actions becomes pretty much intuitive and will bring about a sense of personal, as well as professional, accomplishment.

## Bad Signs!

Astrid Brynestad of Information and Materials Division writes, “I keep thinking someone will turn this one in and get the sign removed. On 9733-1 there is a sign that says K-25/Y-12 Bus Stop. It's just a bit outdated. Do I get an umbrella?”

The answer is yes, Astrid will indeed receive a Y-12 umbrella for her effort.

If you notice a confusing or outdated sign at Y-12, forward the sign location and a brief description of the wording to Melissa Leinart (6ml; 574-1621) of Public Affairs and Communications. If your example is used in a future issue of the *BWXTimes*, you will receive a Y-12 golf umbrella.



## Obituaries

Because of space limitations, death notices for Y-12 active employees and those on long-term disability will include name, date of death and company years of service.

### Lucy A. Hyatt

Died: July 18, 2005

Company service: 28 years

### Edward D. Morton

Died: Aug. 1, 2005

Company service: 29 years

### Gary S. Patterson

Died: July 25, 2005

Company service: 32 years

### Melissa L. Surrence

Died: Aug. 8, 2005

Company service: 14 years

## AUGUST

### 55 Years

**Quality Assurance:** Theodore W. Robinson

### 43 Years

**Applied Technologies:** Matthew J. O'Hara

### 35 Years

**Applied Technologies:** Edward G. Malenovsky

**Facilities, Infrastructure and Services:**

Julius H. Leach, Albert McLendon Jr., Clarence G. Pickel, Larry Waterson and Samuel F. White

**Information and Materials Division:**

Robert L. Waters Jr.

**Manufacturing:** Arnold R. Hawkins and Tulley G. Widner

**Quality Assurance:** Joseph W. Burnett

### 30 Years

**Facilities, Infrastructure and Services:**

Terence L. Heath, Charles L. Turbyfill and James E. Womack

**Manufacturing:** Jenifer T. Delmonte and Paul H. Hight

**National Security Programs:** Thomas R. Gibson

**Quality Assurance:** Lloyd M. Skeen and Johnny W. Williams

### 25 Years

**Applied Technologies:** Kenneth D. Nicklas

**Contracts and Special Initiatives:** Richard W. Illick

**Engineering:** Gregory H. Jones

**Environment, Safety and Health:** Robert W. Oliver

**Facilities, Infrastructure and Services:** David E. Wright

**Manufacturing:** Sanford G. Narramore and Bernard E. Phifer Jr.

**National Security Programs:** David R. Baumgardner

**Quality Assurance:** James L. Garrett



## SEPTEMBER

### 52 Years

**Applied Technologies:** Rayburn C. Waldrop

### 40 Years

**Quality Assurance:** Homer L. Tucker

### 35 Years

**Engineering:** Bernard G. Keylon Jr.

**Equal Opportunity/Concerns:** Anna L. Mccray

**Facilities, Infrastructure and Services:** John P. Clark, James R. Foster, Donald L. Griffith and James E. Russell

**Manufacturing:** Arlis J. Barnes, John C. Leatherwood Jr. and Phillip A. Smallen

**Projects:** David R. Smith

**Quality Assurance:** Terry A. Chance, Bobby D. Hanson, Jerry R. Nichols and Maurice K. Waters

**Safeguards and Security:** Ronnie K. McMahon

### 30 Years

**Engineering:** Paul S. Litherland

**Environment, Safety and Health:** Randy M. Johnson

**Facilities, Infrastructure and Services:**

Kenneth T. Brown, James H. Campbell, Richard L. Hallwas, Paul Harper, David M. Harvey, Steven R. Jones and Gary H. Simon

**Manufacturing:** Betty G. Batmon, Frances M. Neal, John R. Tipton and James E. Wicker

**Quality Assurance:** Gary A. Hackworth and Ruben C. Melton

**Safeguards and Security:** Joe R. Gouldy

### 25 Years

**Applied Technologies:** Christopher P. Bor-ing

**Contracts and Special Initiatives:** Michael D. Brandon

**Engineering:** Dwight D. Butcher

**Environment, Safety and Health:** Robert T. Ford

**Human Resources:** Kathy B. Keathley

**Manufacturing:** Vivian K. Chandler

**Projects:** Wen Thomas

**Quality Assurance:** Curtis A. Hedrick, William R. James and Brenda L. Mitchell

**Safeguards and Security:** Carolyn S. McKenzie

### 20 Years

**Contracts and Special Initiatives:** James L. Pugh and David A. Savoie

**Engineering:** Carol A. Burditt

**Projects:** Thomas W. Morris

# Y-12 BEST

## Building Everyone Safe Tomorrows

Have you been a part of a behavior-based safety observation? If not, ask your supervisor. It will be the best safety meeting you have had lately. . . .



Is the appropriate hand protection being worn for the task being performed? Is the hand protection appropriate for the risk? Is the hand protection in good condition?

## Continuous Monitoring Improves Water Quality

"The Surface Water Hydrological Information Support System for East Fork Poplar Creek embodies Y-12's responsible stewardship of the environment," said Gary Beck of the Clean Water Compliance group. For more than five years SWHISS (pronounced swiss) has supported efforts to improve the water quality and habitat of EFPC, once considered an "industrial ditch," said CWC geologist Steve Field.

Technical Computing programmer Buddy Cate developed the PC-based SWHISS system. Instruments continuously measure the flow rate, temperature, dissolved oxygen and mineral content, chlorine and pH levels. Irregularities trigger audible alarms, computer screens reveal trouble spots and a spill response

coordinator inspects the site if necessary. Situations can be assessed in minutes rather than hours, said Beck.

"We're monitoring a natural ecosystem on a real-time basis," said CWC manager Lenny Vaughan. At least seven million gallons of water per day pass through the SWHISS station where EFPC exits.

Y-12, one of four stations along the creek. The system has thus far accumulated five years of data—more than 14 million readings.

SWHISS is a Y-12 best management practice, not a regulatory requirement, noted Vaughan. Nonstop water quality monitoring is conducted "to demonstrate that the water quality in EFPC continues to improve," said Beck.

# Y-12 Y.E.S.

## Employee Society

### What does YES do for you?

Sure, you've heard about YES and read YSource announcements about YES activities, but do you really know what YES does for you?

YES—the Y-12 Employees' Society—comprises 12 board members who are elected annually by the membership (that's you). The society is a nonprofit corporation chartered August 2001, and all Y-12 employees are automatic members.

Being a YES member provides opportunities to enhance morale by participating in recreational, charitable and community service activities.

The board members are Y-12 employees who volunteer their personal time and expertise to make YES a well received organization.

YES offers you a way to help others in times of need.

Ala Montgomery, YES president, said, "YES is a great organization. Being an active member on the board of directors since the inception of YES has been very rewarding to me personally. YES has helped tornado victims and underprivileged folks at holiday times. I am very proud to be a part of this organization that helps so many folks."

Not only do you help others when you get involved in YES, but you also develop relationships with other Y-12 employees.

"YES promotes positive relationships among co-workers, which is important since we sometimes see our co-workers more than our family members," said YES' Travel Director Lisa Harris.

To find out what's being planned, visit the YES website (<http://www1.y12.doe.gov/community/yes/>) for the latest information on trips, discounts and sports activities.

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# Co-ops get hands-on experience

## ‘Some of the things I’ve learned here I wouldn’t have gotten in school’

After their summer stint at Y-12, 17 co-op students made their final presentations and are back in school.

Four divisions—Applied Technologies; Engineering; Environment, Safety and Health and Quality Assurance—hosted the co-ops from Tennessee State University, Tennessee Technological University, University of Kentucky, University of Pittsburgh and The University of Tennessee.

“Hosting so many co-ops was a significant step for us,” said Armenda Blake, Y-12 Human Resources specialist. “Our goal for FY 2005 was to host 25 co-op students, and we had 17 this summer alone. This structured co-op program combines classroom instruction with work experience for students enrolled in an engineering or scientific discipline, and Y-12 certainly is a great place to get hands-on experience,” added Blake.

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## Students, MS Technology help solve manufacturing problems

Three University of Tennessee-Knoxville nuclear engineering co-op students hit the jackpot this summer when they were assigned to work on microwave materials development, the world’s largest scanning electron microscope and the next-generation microwave melter/caster with Ken Givens of MS Technology Inc., an Oak Ridge-based company and BWXT Y-12 protégé.

Peter McKinnis, Garrett Pitcher and Brian Wood enthusiastically and confidently delivered their final presentation to a Tech 2020 crowd of about 50, including Y-12 and MSTI top management. “We were put to work on day one,” said Wood, and he went on to describe his team’s work, which involved forming low enriched fuel in ice cube-like ceramic trays for stacking and melting ingots in a microwave. “To take a technical problem and rapidly provide a solution is why I became an engineer, and this is a great example of the day-to-day problems Y-12 manufacturing faces,” said the student.

Teaming with MSTI, an engineering and technology firm focused on the development of processing technologies using

The students worked on projects ranging from database design to cutting-edge microwave technology and testing with the world’s largest scanning electron microscope.

During their final presentations summarizing their summer’s work, they also shared insights about being in the work place. Michelle Poore, a UT computer science student working in Applied Technologies, jokingly said, “I realized how important it is to wear very comfortable shoes for the 30 minutes a day I spend on my feet!”

Will Kirkland, a mechanical engineering senior from Parkersburg, West Virginia, said, “Some of the things I’ve learned here I wouldn’t have gotten in school.”



Left: Maya Jordan, a civil and environmental engineering student at Tennessee State University, details her summer project in the Environment, Safety and Health organization. Right: Rob Panaro, engineering physics summer co-op student from the University of Pittsburgh, gives his final presentation summarizing his work on the large-chamber scanning electron microscope, a \$2.2 million piece of equipment.

microwave energy, the co-ops tackled some of today’s toughest technical challenges using state-of-the-art equipment and laboratories. The goal is to use microwave technology on a platform basis in materials manufacturing to save energy, reduce cycle time and improve quality.

Harbans Singla, President of MS Technology, expressed his gratitude to McKinnis, Pitcher and Wood for their splendid contributions and also thanked BWXT Y-12 and the National Nuclear Security Administration for this joint effort provided through the mentor-protégé agreement. “We have been able to provide these co-ops with an excellent opportunity to learn. MSTI’s goal was to show these young engineers how to improve productivity without sacrificing safety, which they learned at the ground level,” he said.

# What can we do?

The devastation that has occurred in Louisiana, Mississippi and Alabama as a result of Hurricane Katrina has reached unimaginable proportions, and the extent of the damage caused is still unfolding.

Y-12 employees have stepped up and donated more than \$33,000 to the relief effort, and several Y-12 employees are directly involved in the relief and cleanup effort, but many of us are looking for ways to do more. Find out how you can help by contacting an agency listed at right. These agencies have been verified as legitimate organizations with direct involvement in the Hurricane Katrina relief effort.

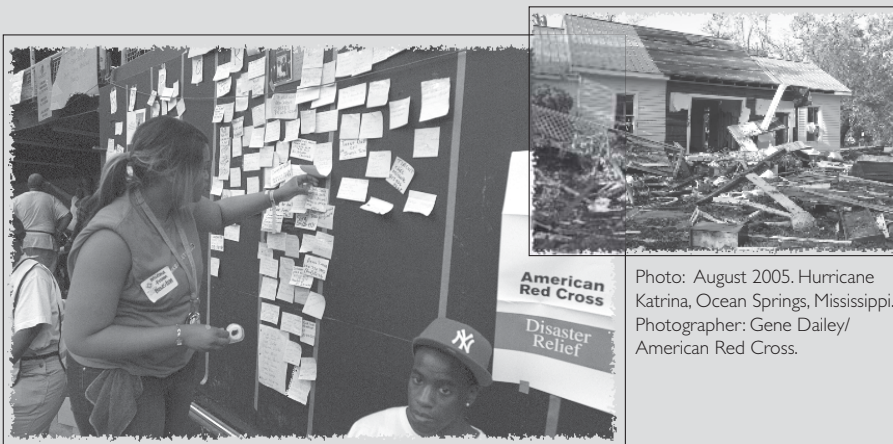


Photo: Houston Astrodome, Sept. 1, 2005. Photographer: Daniel Cima/American Red Cross.

Photo: August 2005. Hurricane Katrina, Ocean Springs, Mississippi. Photographer: Gene Dailey/American Red Cross.

- The American Red Cross  
Appalachian Chapter  
Tony Farris, 865-483-5641  
[www.redcrossoakridge.org](http://www.redcrossoakridge.org)
- American's Second Harvest  
1-800-771-2303  
[www.secondharvest.org](http://www.secondharvest.org)
- ASPCA (American Society for  
the Prevention of Cruelty to  
Animals)  
866-275-3923  
[www.aspc.org](http://www.aspc.org)
- Habitat for Humanity  
[www.habitat.org](http://www.habitat.org)
- North American Mission  
Board/Southern Baptist  
Disaster Relief  
1-800-462-8657  
[www.namb.net/dr](http://www.namb.net/dr)
- Samaritan's Purse  
828-262-1980  
[www.samaritanspurse.org](http://www.samaritanspurse.org)

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